

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 April 2004 (15.04.2004)

PCT

(10) International Publication Number
WO 2004/031387 A1

- (51) International Patent Classification⁷: C12N 15/11
- (21) International Application Number: PCT/AU2003/001314
- (22) International Filing Date: 7 October 2003 (07.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2002951899 4 October 2002 (04.10.2002) AU
- (71) Applicant (for all designated States except US): MAC-
QUARIE UNIVERSITY [AU/AU]; North Ryde, New
South Wales 2109 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BERGQUIST, Pe-
ter, Leonard [NZ/NZ]; 3A Pukerangi Crescent, Ellerslie,
Auckland 1005 (NZ). GIBBS, Moreland, David [NZ/AU];
15/184 Waterloo Road, Marsfield, New South Wales 2122
(AU). REEVES, Rosalind [AU/AU]; 12 Forwood Avenue,
Turramurra, New South Wales 2074 (AU).
- (74) Agent: ALLENS ARTHUR ROBINSON PATENT &
TRADE MARKS ATTORNEYS; The Chifley Tower, 2
Chifley Square, Sydney, NSW 2000 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: RANDOM DRIFT MUTAGENESIS

(57) Abstract: A method for producing a mutant gene encoding a functional gene product comprising: (a) introducing one or more mutations into a gene to form a mutated gene; (b) providing the mutated gene to a host microorganism; (c) culturing the host microorganism containing the mutated gene under conditions which allow expression of the mutant gene product; and (d) selecting a host microorganism capable of producing a functional gene product from the mutated gene.

WO 2004/031387 A1